Rajat Sethi – ECE 4380 – HW 9

1. When the server receives the FIN/ACK, it knows for a fact that the client will not be sending any more packets (except for possibly a duplicate, which will get thrown out). As such, there is no reason for the server to timeout.
2. The receiver would need a timer to determine when the last time a sender probed, and it also needs a timer to make sure that its own report to the sender makes it through.
3. The initial sequence number is random. If the first byte happens to be too close to INT\_MAX, then eventually one of the later bytes could overflow and go back to 0.

4a.) Server moves to CLOSE\_WAIT; Server moves to LAST\_ACK; Client moves to FIN\_WAIT\_1

4b.) Client moves to CLOSING; Client moves to TIME\_WAIT; Server moves to CLOSED; Client moves to CLOSED

4c.) Server still moves to CLOSE\_WAIT; Client does not move to FIN\_WAIT\_1; When client initiates its own close, then TCP continues.

5.) I have no idea